Total carbohydrate in leg before perfusion (glycogen and sugar) (.12 per cent.)	1.260 gms.
Total carbohydrate in leg after perfusion (.1645 per cent.)	1.645 "
Gain	.3850 "
Total volume blood used in perfusion	500 c.c.
Content of sugar at beginning (.5472 per cent.)	2.7160 "
After four perfusions (2 hrs., 30 mins.) blood remained after samples were taken for analysis	310 c.c.
Amount of sugar this contained (.4348 per cent.)	1.3478 "
Total loss of sugar in blood	1.3682 "
Sugar recovered from samples	.3508 "
Recovered by difference in muscles at end	.3850 "
Sugar loss by oxidation	.6324 "

If the amount of dextrose in the original blood be calculated at one part per thousand there would be at least .3204 gm. of levulose used by the muscles, granting that the dextrose be utilized before the levulose, an assumption which has no facts to support it.

A second experiment carried out in the same way where the sugar at the beginning was .8620 per cent. at the end of the perfusion of over four hours' duration contained .3360 per cent. The total loss of sugar was 1.0997 gm. Dextrose content at beginning was .0801 per cent. Loss of levulose at least .7693 gm. The results show that levulose as dextrose is attacked directly by the living tissues. If there be a conversion of either into glycogen it takes place in the muscle as it is oxidized, which is highly improbable.

Maltose is not used directly by the muscle. There is some loss of sugar, but if we assume that the dextrose in the blood is utilized in preference to maltose, no reduction of the quantity of maltose takes place. If we grant that both are used equally there could be at most only a slight reduction of the maltose. Some interesting features in connection with the vitality of the muscles are brought out in maltose perfusions, *e. g.*,

	Per Cent.
The blood after addition of maltose	.6325
The blood after 30 minutes (first perfusion)	.5720
The blood after 68 minutes (fifth perfusion)	.5720
The blood after 4 hrs., 16 mins. (fourteenth perfusion)	.4720
Sugar in non-perfused leg	.0500
Sugar in perfused leg at end of experiment	.2250

The total sugar recovered is almost equal to that at the beginning. Between the fifth perfusion and the fourteenth the reaction to stimulation decreased markedly, and the transudation of the sugar into the muscles appeared to occur *pari passu* with the loss of the vitality of the muscle. The loss of sugar in the first thirty minutes was less than the dextrose content of the blood at the beginning. The loss thereafter was very slight.

Investigation of the other sugars has not been concluded.

Hugh McGuigan
Washington University
Medical School

QUOTATIONS

The Committee of One Hundred

One of the largest and most enthusiastic of the sectional meetings of the American Association for the Advancement of Science, recently held in Chicago, was the Symposium on Federal Regulation of Public Health, held by the Economic Section in conjunction with the Committee of One Hundred on National Health, and representatives from other great organizations. The opening address was by Professor William H. Welch, the retiring president of the American Association for the Advancement of Science, and in it he emphasized the importance of the movement conducted by the Committee of One Hundred. He described the existing neglect of health as shameful, and pointed out that, if existing hygienic knowledge were fully applied, the death-rate might be cut in two. As examples of what a Federal Health Bureau might do he cited the work of Pasteur and Koch, whose best work was done for the national governments of France and Germany, though the benefits have been shared by all nations. In America we lack even the statistics of disease except in a limited area. Professor F. F. Wesbrook, the dean of the Medical School of the University of Minnesota, showed the need

of federal jurisdiction over railways and waterways, which carry diseases from one state to another, and showed that such jurisdiction would have prevented the Chicago-St. Louis controversy over the drainage canal. Mr. Edward T. Devine made a stirring speech, bringing home to the audience what a reduction in the death-rate means in the concrete experience of the individual. The elimination of deaths from tuberculosis, even if the same number of deaths were added to the mortality from other diseases coming later in life, would lengthen the average life by twelve years. In the summer of 1906 Professor J. P. Norton, of Yale, read a paper before the Economic Section of the American Association for the Advancement of Science, on the "Economic Advisability of a National Organization of Health," which excited much interest and resulted in the formation of the Committee of One Hundred. This committee was first formally organized on April 18, 1907. Its officers at present are: President, Irving Fisher; secretary, Edward T. Devine; treasurer, Title Guarantee and Trust Company; vice-presidents, the Rev. Lyman Abbott, Miss Jane Addams, Dr. Felix Adler, President James B. Angell, the Hon. Joseph H. Choate, President Charles W. Eliot, Archbishop Ireland, the Hon. Ben B. Lindsey, Mr. John Mitchell, Dr. William H. Welch. In the following month (May, 1907) President Roosevelt sent the committee a letter of indorsement in which he said:

> Our national health is physically our greatest national asset. To prevent any possible deterioration of the American stock should be a national ambition. We can not too strongly insist on the necessity of proper ideals for the family, for simple living, and for those habits and tastes which produce vigor and make men capable of strenuous service for their country. The preservation of national vigor should be a matter of patriotism. I can most cordially commend the endeavors of your committee to bring these matters prominently before the public.

There are now about six thousand five hundred persons on the various mailing lists of the Committee of One Hundred. The American Health League, the national society affiliated with the Committee of One Hundred, is growing with amazing rapidity—a fact significant of the popular interest in the movement. Every member of congress has been written to, and a large number have expressed their willingness to advocate health measures. The first legislative measure will be one to authorize the President to redistribute the existing scientific and health bureaus of the government. The recent unfortunate experience with the present arrangement of bureaus in the navy is only one of many instances of lack of cooperation and coordination. It is not anticipated that these existing bureaus will oppose a rearrangement. On the contrary, it is known that most of them favor it, especially as, after the redistribution, their powers and appropriations, as well as their efficiency, will be increased. The committee has received the indorsement of the American Medical Association and of a number of other organizations engaged in the work of human betterment, including the American Association for the Advancement of Science itself, which at its recent meeting voted that hereafter the committee should represent not only the Economic Section in which it originated, but the entire association.—*The Outlook.*

BOTANICAL NOTES

A STUDY OF PHILIPPINE WOODS

IN the *Philippine Journal of Science* for October, 1907, Mr. F. W. Foxworthy publishes an interesting and very valuable paper on the structure, physical and chemical properties, uses, durability and botanical classification of the commercial woods of the Philippine Islands. The paper opens with a general and technical discussion of the gross morphology, the minute anatomy, color, odor, weight, seasoning, durability and uses, and this is followed by a key to the commercial woods, based upon structural characters of the woods themselves, and supplemented by photographic plates of fifty-five kinds. The names given are those which are used on the islands, and the kinds are arranged in the alphabetical order of the most widely used of these names. Thus the native name is given first, then are given in succession, the scientific name (with